

WHAT IS CLAIMED IS:

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1. A private branch exchange system comprising:
a plurality of mobile stations each having a
plurality of extension numbers and each having different
lines set for said plurality of extension numbers

5 respectively;

a base station wirelessly connected to said
plurality of mobile stations; and

an exchange station for performing call control of
said plurality of mobile stations through said base
10 station.

2. The private branch exchange system according
to claim 1, wherein at least one of said plurality of
extension numbers set for said plurality of mobile
stations is a unique extension number for each of said
5 plurality of mobile stations.

3. The private branch exchange system according
to claim 2, wherein said plurality of mobile stations
each have a transfer function for transferring a call
directed to a line to another line.

4. A private branch exchange system comprising:
a plurality of mobile stations;

a base station wirelessly connected to said plurality of mobile stations; and

5 an exchange station for performing call control of said plurality of mobile stations through said base station,

wherein each of said plurality of mobile stations has the same extension number as that of one or more
10 predetermined other mobile station.

5. The private branch exchange system according to claim 4, wherein said plurality of mobile stations each have a plurality of extension numbers and different lines are set for said plurality of extension numbers
5 respectively.

6. The private branch exchange system according to claim 5, wherein at least one of said plurality of extension numbers set for said plurality of mobile stations is a unique extension number for each of said
5 plurality of mobile stations.

7. The private branch exchange system according to claim 1, wherein said plurality of mobile stations each have line key buttons for setting said plurality of lines.

8. The private branch exchange system according to claim 5, wherein said plurality of mobile stations each have line key buttons for setting said plurality of lines.

9. The private branch exchange system according to claim 2, wherein said plurality of mobile stations each have line key buttons for setting said plurality of lines.

10. The private branch exchange system according to claim 3, wherein said plurality of mobile stations each have line key buttons for setting said plurality of lines.

11. The private branch exchange system according to claim 6, wherein said plurality of mobile stations each have line key buttons for setting said plurality of lines.

12. The private branch exchange system according to claim 1, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state of each of said plurality of lines; and

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10 a line state control section for sending a direction for performing call control to said call control section based on the information for each extension number managed by said data managing section and the state of the line managed by said line state managing section,

15 wherein said call control section performs call control of said plurality of mobile sections based on the direction sent from said line state control section.

13. The private branch exchange system according to claim 4, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state of each of said plurality of lines; and

a line state control section for sending a direction
10 for performing call control to said call control section based on the information for each extension number managed by said data managing section and the state of the line managed by said line state managing section,

wherein said call control section performs call
15 control of said plurality of mobile sections based on the

direction sent from said line state control section.

14. The private branch exchange system according to claim 7, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state of each of said plurality of lines; and

10 a line state control section for sending a direction for performing call control to said call control section based on the information for each extension number managed by said data managing section and the state of the line managed by said line state managing section,

wherein said call control section performs call control of said plurality of mobile sections based on the direction sent from said line state control section.

15 15. The private branch exchange system according to claim 2, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state

of each of said plurality of lines; and

10 a line state control section for sending a direction
for performing call control to said call control section
based on the information for each extension number
managed by said data managing section and the state of
the line managed by said line state managing section,
wherein said call control section performs call
15 control of said plurality of mobile sections based on the
direction sent from said line state control section.

16. The private branch exchange system according
to claim 3, wherein said exchange station comprises:

a call control section for performing call control
of said plurality of mobile stations;

5 a data managing section for managing information for
each of said plurality of extension numbers;

a line state managing section for managing a state
of each of said plurality of lines; and

a line state control section for sending a direction
10 for performing call control to said call control section
based on the information for each extension number
managed by said data managing section and the state of
the line managed by said line state managing section,
wherein said call control section performs call
15 control of said plurality of mobile sections based on the
direction sent from said line state control section.

17. The private branch exchange system according to claim 6, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state of each of said plurality of lines; and

10 a line state control section for sending a direction for performing call control to said call control section based on the information for each extension number managed by said data managing section and the state of the line managed by said line state managing section,

15 wherein said call control section performs call control of said plurality of mobile sections based on the direction sent from said line state control section.

18. The private branch exchange system according to claim 9, wherein said exchange station comprises:

a call control section for performing call control of said plurality of mobile stations;

5 a data managing section for managing information for each of said plurality of extension numbers;

a line state managing section for managing a state of each of said plurality of lines; and

a line state control section for sending a direction
for performing call control to said call control section
based on the information for each extension number
managed by said data managing section and the state of
the line managed by said line state managing section,
wherein said call control section performs call
control of said plurality of mobile sections based on the
direction sent from said line state control section.

19. The private branch exchange system according to claim 15, wherein said line state control section comprises:

means for sending a direction to perform call
5 control to said call control section; and

means for rewriting the state of the line managed by said line state managing section based on the call control.

20. The private branch exchange system according to claim 16, wherein said line state control section comprises:

means for sending a direction to perform call
5 control to said call control section; and

means for rewriting the state of the line managed by said line state managing section based on the call control.

21. The private branch exchange system according to claim 17, wherein said line state control section comprises:

5 means for sending a direction to perform call control to said call control section; and

means for rewriting the state of the line managed by said line state managing section based on the call control.

22. The private branch exchange system according to claim 18, wherein said line state control section comprises:

5 means for sending a direction to perform call control to said call control section; and

means for rewriting the state of the line managed by said line state managing section based on the call control.

23. The private branch exchange system according to claim 15, wherein said data managing section manages data comprising:

5 said extension number;
identification information for indicating if said extension number is a unique extension number of said mobile station; and

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10 a list for storing, when said extension number is a
unique extension number of said mobile station, all other
extension numbers set for a mobile station which has said
extension number as its unique extension number, and for
storing, when said extension number is not a unique
extension number of said mobile station, unique extension
numbers of all mobile stations which have said extension
15 number set,

the number of sets of said data being equal to the
number of the plurality of extension numbers.

24. The private branch exchange system according
to claim 19, wherein said data managing section manages
data comprising:

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5 said extension number;
identification information for indicating if said
extension number is a unique extension number of said
mobile station; and

a list for storing, when said extension number is a
unique extension number of said mobile station, all other
10 extension numbers set for a mobile station which has said
extension number as its unique extension number, and for
storing, when said extension number is not a unique
extension number of said mobile station, unique extension
numbers of all mobile stations which have said extension
15 number set,

the number of sets of said data being equal to the number of the plurality of extension numbers.

25. The private branch exchange system according to claim 23, wherein said line state control section comprises:

5 means for acquiring, from a unique extension number of said mobile station, other extension numbers set for a mobile station which has the extension number as its unique extension number using the information managed by said data managing section;

10 means for acquiring, from an extension number other than a unique extension number of said mobile station, a unique extension number of a mobile station which has the extension number set;

15 means for extracting the state of the lines managed by said line state managing section based on the acquired extension number; and

means for sending a direction to perform call control to said call control section based on the state of the line.

26. The private branch exchange system according to claim 24, wherein said line state control section comprises:

means for acquiring, from a unique extension number

5 of said mobile station, other extension numbers set for a mobile station which has the extension number as its unique extension number using the information managed by said data managing section;

10 means for acquiring, from an extension number other than a unique extension number of said mobile station, a unique extension number of a mobile station which has the extension number set;

15 means for extracting the state of the lines managed by said line state managing section based on the acquired extension number; and

means for sending a direction to perform call control to said call control section based on the state of the line.

27. The private branch exchange system according to claim 25, wherein said plurality of mobile stations each have an extension number for which a line in the wired private branch exchange system is set.

28. The private branch exchange system according to claim 26, wherein said plurality of mobile stations each have an extension number for which a line in the wired private branch exchange system is set.